

Manufacturer of Precision Tools and Equipment

PAGE 1

MANUFACTURE INFORMATION

GROBET FILE CO. OF AMERICA, INC.
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CARLSTADT, NJ 07072

EMERGENCY PHONE.....: 800-255-3924
PREPARATION/REVISION DATE: 07/20/99

TRADE NAME/SYNONYMS...: BORAX 7 OZ
CHEMICAL NAME/SYNONYMS: SODIUM TETRABORAT
CHEMICAL FAMILY.....: INORGANIC BORATES
FORMULA.....: $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$
PRODUCT CODE.....: 22.821

***** HAZARDOUS INGREDIENTS *****

DOES PRODUCT CONTAIN HAZARDOUS INGREDIENTS? (Y,N,N/A,N/I) : Y

CHEMICAL/COMMON NAME	CAS-NUMBER	%	PEL-OSHA	TLV-ACGIH
SODIUM TETRABORATE	1303-96-4	>99	10MG/M3	5MG/M3

DOES PRODUCT CONTAIN CARCINOGENS (NTP, IARC, OR OSHA)? (Y,N,N/A,N/I): N

***** HEALTH HAZARD DATA *****

HEALTH EFFECTS (ACUTE AND CHRONIC)

INHALATION; OCCASIONAL MILD IRRITATION EFFECTS TO NOSE AND THROAT MAY OCCUR FROM INHALATION OF SODIUM TETRABORATE DECAHYDRATE DUSTS AT LEVELS GREATER THAN 10MG/M3.

EYE CONTACT; SODIUM TETRABORATE DECAHYDRATE IS NON-IRRITATING TO EYES IN NORMAL INDUSTRIAL USE.

SKIN CONTACT; SODIUM TETRABORATE DECAHYDRATE DOES NOT CAUSE IRRITATION TO INTACT SKIN.

INGESTION; PRODUCTS CONTAINING SODIUM TETRABORATE DECAHYDRATE ARE NOT INTENDED FOR INGESTION. SODIUM TETRABORATE DECAHYDRATE HAS A RELATIVELY LOW ACUTE TOXICITY. SMALL AMOUNTS (E.G. A TEASPOONFUL) SWALLOWED ACCIDENTALLY ARE NOT LIKELY TO CAUSE EFFECTS; SWALLOWING AMOUNTS LARGER THAN THAT MAY CAUSE GASTRO-INTESTINAL SYMPTOMS.

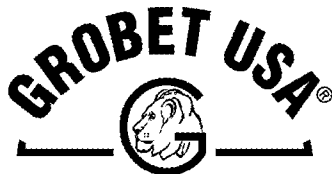
SIGNS AND SYMPTOMS OF EXPOSURE; SYMPTOMS OF ACCIDENTAL OVEREXPOSURE TO BORATE PRODUCTS HAVE BEEN ASSOCIATED WITH INGESTION OR BY ABSORPTION THROUGH LARGE AREAS OF DAMAGED SKIN. THESE MAY INCLUDE NAUSEA, VOMITING, AND DIARRHEA, WITH DELAYED EFFECTS OF SKIN REDNESS AND PEELING.

PRIMARY ROUTES OF ENTRY

INHALATION, EYE CONTACT, SKIN CONTACT, INGESTION.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

N/A



Manufacturer of Precision Tools and Equipment

PAGE

2

EMERGENCY FIRST AID PROCEDURES

INHALATION; NO SPECIFIC TREATMENT IS NECESSARY SINCE SODIUM TETRABORATE DECAHYDRATE IS NOT LIKELY TO BE HAZARDOUS BY INHALATION. PROLONGED EXPOSURE TO DUST LEVELS IN EXCESS OF REGULATORY LIMITS SHOULD ALWAYS BE AVOIDED.

EYE CONTACT; USE EYEWASH FOUNTAIN OR FRESH WATER TO CLEANSE EYE. IF IRRITATION PERSISTS FOR MORE THAN 30 MINUTES, SEEK MEDICAL ATTENTION.

SKIN CONTACT; NO TREATMENT NECESSARY BECAUSE NON-IRRITATING.

INGESTION; SWALLOWING LESS THAN ONE TEASPOONFUL WILL CAUSE NO HARM TO HEALTHY ADULTS. IF LARGER AMOUNTS ARE SWALLOWED, GIVE TWO GLASSES OF WATER TO DRINK AND SEEK MEDICAL ATTENTION.

NOTE TO PHYSICIANS; OBSERVATION ONLY IS REQUIRED FOR ADULT INGESTION OF A FEW GRAMS OF SODIUM TETRABORATE DECAHYDRATE. FOR INGESTION OF LARGER AMOUNTS, MAINTAIN ADEQUATE KIDNEY FUNCTION AND FORCE FLUIDS. GASTRIC LAVAGE IS RECOMMENDED FOR SYMPTOMATIC PATIENTS ONLY. HEMODIALYSIS SHOULD BE RESERVED FOR MASSIVE ACUTE INGESTION OR PATIENTS WITH RENAL FAILURE. BORON ANALYSIS OF URINE OR BLOOD ARE ONLY USEFUL FOR DOCUMENTING EXPOSURE AND SHOULD NOT BE USED TO EVALUATE SEVERITY OF POISONING OR TO GUIDE TREATMENT. 24 HOUR MEDICAL CONSULTATION IS AVAILABLE AT 800-228-5635 EXT. 144

***** CHEMICAL DATA *****

BOILING POINT(F)....	N/A	SPECIFIC GRAVITY(WATER=1).....	1.71
VAPOR PRESSURE(MMHG)	NEGLIG	PERCENT VOLATILE BY VOLUME(%).....	N/A
VAPOR DENSITY(AIR=1)	N/A	EVAP RATE(N/A =1)	N/A

SOLUBILITY IN WATER.. 5.8% @ 20C; 65.6% @ 100C

APPEARANCE AND ODOR INFORMATION

WHITE ODORLESS CRYSTALLINE SOLID

***** PHYSICAL HAZARD DATA *****

FLASH POINT (METHOD USED) N/A FLAMMABLE LIMITS-LEL= N/A UEL= N/A

EXTINGUISHING MEDIA

ANY FIRE EXTINGUISHING MEDIA MAY BE USED ON NEARBY FIRES

SPECIAL FIRE FIGHTING PROCEDURES

NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS

NONE, BECAUSE SODIUM TETRABORATE DECAHYDRATE IS NOT FLAMMABLE, COMBUSTIBLE OR EXPLOSIVE. THE PRODUCT IS ITSELF A FLAME RETARDENT.



Manufacturer of Precision Tools and Equipment

PAGE 3

***** REACTIVITY DATA *****

INCOMPATIBILITY (MATERIALS TO AVOID)

REACTIONS WITH STRONG REDUCING AGENTS SUCH AS METAL HYDRIDES OR ALKALI METALS WILL GENERATE HYDROGEN GAS WHICH COULD CREATE AN EXPLOSIVE HAZARD.

HAZARDOUS DECOMPOSITION PRODUCTS

NONE

WILL HAZARDOUS POLYMERIZATION OCCUR

N/A

CONDITIONS TO AVOID/POLYMERIZATION

N/A

IS THE PRODUCT STABLE

YES

CONDITIONS TO AVOID/STABILITY

N/A

***** SPILL AND LEAK PROCEDURES *****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

GENERAL; SODIUM TETRABORATE DECAHYDRATE IS A WATER SOLUBLE WHITE POWDER THAT MAY CAUSE DAMAGE TO TREES OR VEGETATION BY ROOT ABSORPTION.

LAND SPILL; VACUUM, SHOVEL OR SWEEP UP SODIUM TETRABORATE DECAHYDRATE AND PLACE IN CONTAINERS FOR DISPOSAL IN ACCORDANCE WITH APPLICABLE LOCAL REGULATIONS. AVOID CONTAMINATION OF WATER BODIES DURING CLEAN UP AND DISPOSAL. NO PERSONAL PROTECTIVE EQUIPMENT IS NEEDED TO CLEAN UP LAND SPILLS.

WATER SPILL; SODIUM TETRABORATE DECAHYDRATE WILL CAUSE LOCALIZED CONTAMINATION OF SURROUNDING WATERS DEPENDING ON THE QUANTITY DISSOLVED IN THESE WATERS AT HIGH CONCENTRATIONS SOME DAMAGE TO LOCAL VEGETATION, FISH AND OTHER AQUATIC LIFE MAY BE EXPECTED.

WASTE DISPOSAL METHOD

SMALL QUANTITIES OF SODIUM TETRABORATE DECAHYDRATE CAN USUALLY BE DISPOSED OF AT MUNICIPAL LANDFILL SITES. NO SPECIAL DISPOSAL TREATMENT IS REQUIRED, BUT REFER TO STATE AND LOCAL REGULATIONS FOR APPLICABLE SITE-SPECIFIC REQUIREMENTS. TONNAGE QUANTITIES OF PRODUCT ARE NOT RECOMMENDED TO BE SENT TO LANDFILLS. SUCH PRODUCT SHOULD, IF POSSIBLE, BE RE-USED FOR AN APPROPRIATE APPLICATION.

***** EXPOSURE CONTROL INFORMATION *****

VENTILATION



Manufacturer of Precision Tools and Equipment

PAGE

4

LOCAL EXHAUST YES
SPECIAL..... N/A

MECHANICAL (GEN) N/A
OTHER..... N/A

RESPIRATORY PROTECTION

WHERE AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS, NIOSH/MSHS CERTIFIED RESPIRATORS MUST BE USED.

PROTECTIVE GLOVES

NOT REQUIRED FOR FOR NORMAL INDUSTRIAL EXPOSURES, BUT MAY BE WARRANTED IF ENVIRONMENT IS EXCESSIVELY DUSTY.

OTHER PROTECTIVE EQUIPMENT

EYE GOGGLES ARE NOT REQUIRED FOR NORMAL INDUSTRIAL EXPOSURES, BUT MAY BE WARRANTED IF ENVIRONMENT IS EXCESSIVELY DUSTY.

OTHER ENGINEERING CONTROLS

USE LOCAL EXHAUST VENTILATION TO KEEP AIRBORNE CONCENTRATIONS OF SODIUM TETRABORATE DECAHYDRATE DUST BELOW PERMISSIBLE EXPOSURE LEVELS.

WORK PRACTICES

GOOD HOUSEKEEPING PROCEDURES SHOULD BE FOLLOWED TO MINIMIZE DUST GENERATION AND ACCUMULATION..

HYGENIC PRACTICES

SEE ABOVE

***** SPECIAL PRECAUTIONS *****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

AMBIENT TEMPERATURES, ATMOSPHERIC PRESSURES.

NO SPECIAL HANDLING PRECAUTIONS ARE REQUIRED, BUT DRY INDOOR STORAGE IS RECOMMENDED.

MAINTENANCE PRECAUTIONS

TO MAINTAIN PACKAGE INTEGRITY AND TO MINIMIZE CAKING OF THE PRODUCT, BAGS SHOULD BE HANDLED ON A "FIRST IN-FIRST OUT" BASIS.

OTHER PRECAUTIONS

N/A

OTHER COMMENTS

N/A